

INTERMOUNTAIN POWER SERVICE CORPORATION

June 7, 2001

Richard Sprott, Director Division of Air Quality Department of Environmental Quality P.O. Box 144820 Salt Lake City, UT 84114-4820

Attention: Milka Radulovic

Dear Director Sprott:

IPSC NOTICE OF INTENT: Corrections

On April 4, 2001, Intermountain Power Service Corporation (IPSC) submitted a Notice of Intent (NOI) to modify the Intermountain Generating Station (IGS) in Delta, Utah. Up through May 29, 2001, IPSC submitted other information for the NOI, including a Best Available Control Technology (BACT) analysis. Pursuant to a request from the Division of Air Quality, we are herewith submitting information that corrects inaccuracies found in those documents.

Corrections to the Notice of Intent, dated April 4, 2001:

Page 1, 2nd paragraph under Section (1) PROCESS DESCRIPTION: This paragraph discusses boiler capacity in the last sentence. This should state that 'normal' boiler 'operating' capacity is about 6.2 million lbs steam per hour at 2822 psi drum pressure. The current boiler maximum capacity rating (MCR) is 6.6 million lbs steam per hour at 2975 psi.

Page 2. Last paragraph under Section (3) POLLUTION DEVICE DESCRIPTION:

This paragraph discusses proposed changes to NOx control technology in the last sentence. The term "moderately" should be removed, and the words "addition of best available control technology" should replace "replacement of the existing dual register low NOx burners with new technology staged combustion low NOx burners." The last sentence would then read "Also, the project includes installation of improved NOx controls, such as the addition of best available control technology."

Page 5, second bullet, "NOx Reduction Project":
The term "moderate" should be replaced with "BACT" in the first
and last sentences.

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Mr. Richard Sprott Page 2 June 7, 2001

ATTACHMENT 1, Worksheet A:

A new worksheet is attached to correct oversights in decimal or arithmetic errors, specific to lead and beryllium.

ATTACHMENT 1, Worksheet B:

A new worksheet is attached to correct oversights in decimal or arithmetic errors, specific to lead and beryllium.

ATTACHMENT 1, Worksheet C:

This worksheet addresses hazardous air pollutants as required at R307-410-4. There are several chemicals for which screen modeling may be required. A new worksheet is attached with modeling results using SCREEN3.

Corrections to BACT Analysis, dated May 29, 2001:

Page 2, Table 1, Typical Coal Characteristics: This table has several different types of ASTM analytical representations of coal. To clarify this, a new Table 1 is attached here.

Completion

We appreciate the efforts of your staff in working with us. In a June 1, 2001 meeting, IPSC & DAQ discussed a probable time line to bring an approval order to fruition. We therefore assume that our NOI application is considered complete. However, IPSC will continue to provide clarifying information as requested to ensure the approval process proceeds smoothly. If, for some reason your office foresees any problem that could delay the issuance of an approval order, please contact us as soon as possible.

If you or any one of your staff have any questions, please contact Mr. Dennis Killian, Superintendent of Technical Services, at 435-864-4414, or <u>dennis-k@ipsc.com</u>.

Cordially,

S. Gale Chapman

President and Chief Operating Officer

RJC/BP/db Enclosures

> cc: Blaine Ipson, IPSC Reed Searle, IPA Mike Nosanov, LADWP

						ATTA	ATTACHMENT 1: Worksheet A	orksheet A
NOI / PSD Calculations								
Operating & Production								
Parameter	Average Value	Mon	Post-Change Value					
Rated Output	875	Mwhe	920					
Fuel Use (Coal)	5,264,292	tons/yr	5,578,473					
Plant Operating Time	16,386	Unit hours	16,386					
Heat Value	11,872	BTU/Ib	11,872					
Heat Input (Actual)	7,628	MMBtu/hr	8,083					
Heat Input (Design)	8,352	MMBtu/hr	9,225					
Heat Rate	9,564	Btu/KWhr	9,475					
Flow - Stack	125,000,000	scfh	133,000,000					
Emissions = =					PSD Significance	PSD Major	Difference	PSD
Parameter/Pollutant	2 Yr Average Value	점이	Post-Change Value	Change+/-	Levels	Trigger Value	(Trigger - Post)	Triggered?
PSD								
SO2	3586.31	Tons	3513.10	-73.21	40	3626.31	-113.21	z
SO2 % Removal	93.62	%	93.88					
NOX	25143.97	Tons	24346.10	-797.87	40	25183.97	-837.87	z
00	1317.06	Tons	1394.60	77.54	100	,	-22.46	z
PM10	273.77	Tons	283.51	9.75	15	288.77	-5.25	z
Lead	180.0	Tons	0.105	0.018	0.600		-0.582	z
VOC	12.65	Tons	13.40	0.75	. 40	52.65	-39.25	z
Beryllium	0.0010	Tons	0.0011	0.00010	0.0004	0.0014	0.00030	z
Mercury	0.081	Tons	0.105	0.024	0.100	0.181	-	z
Fluorides (HF)	9.70	Tons	10.16	0.46	က	12.70	-2.54	Z
Sulfuric Acid	4.06	Tons	4.05	-0.01	7	11.06	-7.01	2

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SCREEN3 Modeling Results - HAP's

Listed compounds exceeded Emission Treshold Values, or had no OSHA values.

	Calc'd Results	Model Input	Model Output
POLLUTANT	Emission Rate (lbs/hr)	Emission Rate (g/s)	Max. Concentration (ug/m3)
Arsenic	0.001230355	0.000155025	0.00013
DEHP	0.001399686	0.00017636	0.0001479
Cyanide	0.047934441	0.00603974	0.005065
2,4-Dinitrotoluene	5.36866E-06	6.76451E-07	5.673 E-07
Ethylene Dibromide	2.30085E-05	2.89907E-06	0.00002431
Propionaldehyde	0.007286035	0.00091804	0.0007699
Hydrogen Chloride	0.009981802	0.001257707	0.001055
Hydrogen Fluoride	0.056113641	0.007070319	0.00593

Assumptions:

Point Source

Stack Height 219m

Stack Diameter 8.6m

Gas Volume 2,166,667acfm

Stack Temp 322K

Ambient Temp 293K

Receptor Height 0m (flat terrain to max distance)

Rural Option

No Bldg Downwash

Simple Terrain (flat terrain to max distance)

Full Meteorology

Auto Distance Array

Terrain Height 0m

Min Distance 750m (Property Boundary)

Max Distance 100km

Distance to Max. Concentration 1117m

TABLE 1 TYPICAL IPSC COAL PHYSICAL AND CHEMICAL CHARACTERISTICS

Type of Analysis	Parameter	Actual Average
Proximate	Volatile	38.1%
	Moisture	8.5 %
	Ash	9.2 %
	Fixed Carbon	44.2%
ASTM Other	Sulfur	0.52 %
	Heating Value	11,850 btu/lb
	Grindability	46 HGI
Ultimate	%C	66.47 %
	%H	4.77 %
	%N	1.28 %
	%S	0.52 %
	%O	9.26 %
Trace	Antimony	3.1 ppm
	Arsenic	12 ppm
	Barium	113 ppm
· · · · · · · · · · · · · · · · · · ·	Beryllium	0.38 ppm
	Cadmium	0.66 ppm
	Chromium	24 ppm
	Cobalt	2.9 ppm
	Copper	7.8 ppm
	Hydrogen Chloride	299 ppm
	Hydrogen Fluoride	63 ppm
	Lead	7.1 ppm
	Manganese	9.9 ppm
	Mercury	0.061 ppm
	Nickel	4.7 ppm
	Selenium	2.4 ppm
	Vanadium	5.6 ppm
	Zinc	7.4 ppm
Mineral (Ash)	Silicon Dioxide	63.2 %
	Aluminum Oxide	15.5 %
	Titanium Dioxide	0.8 %
	Iron Oxide	3.3 %
	Calcium Oxide	7.1 %
	Magnesium Oxide	2.9 %
	Potassium Oxide	1.5 %
	Sodium Oxide	2.1 %
	Phosphorus Pentoxide	0.2 %
	Sulfur Trioxide	4.2 %
	Silica Equivalent Value	86.4 %
	Base:Acid Ratio	0.21
	Fusion Temperature (Fluid)	2333+ F

NOTE:

Data provided here are estimates only, based on available industry-wide information combined with specific analyses. These are not limits, but arithmetic means bounded by wide ranges of concentrations that are dependent on fuel source and type. Solid fuels naturally have wide variability in characteristics. This fuel information is in no way intended to represent binding fuel parameters.

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